

SEQLIST.TXT
SEQUENCE LISTING

<110> Albert, Lai

<120> NOVEL SPLICE VARIANTS OF HUMAN Dkk1

<130> PP023359.0003

<140> 10/574182

<141> 2007-05-31

<150> PCT/US04/34256

<151> 2004-09-30

<150> 60/507682

<151> 2003-09-30

<160> 26

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 819

<212> DNA

<213> homo sapien

<400> 1

atgggagaag	cttccccacc	tgcccccgca	aggcggcatc	tgctggctct	gctgctgctc	60
ctctctaccc	tggtgatccc	ctccgctgca	gtctctatcc	atgatgctga	cgcccaagag	120
agctccttgg	gtctcacagg	cttccagagc	ctactccaag	gcttcagccg	acttttctcg	180
aaaggtaacc	tgcttcgggg	catagacagc	ttattctctg	ccccatgga	cttcgggggc	240
ctccctggga	actaccacaa	agaggagaac	caggagcacc	agctggggaa	caacaccctc	300
tcagaccacc	tcagatcga	caagaggacc	gacaacaaga	caggagaggt	gctgatctcc	360
gagaatgtgg	tggcatccat	tcaaccagcg	gaggggagct	tcgaggggtg	tttgaaggta	420
ccaggatgg	aggagaagga	ggccctggta	cccatccaga	aggccacgga	cagcttccac	480
acagaactcc	atccccgggt	ggccttctgg	atcattaagc	tgccacggcg	gaggtccac	540
caggatgccc	tggaggggcg	ccactggctc	agcgagaagc	gacccgcct	gcagggccatc	600
cgggatggac	tccgcaagg	gacccacaag	gacgtcctag	aagagggggac	cgagagctcc	660
tcccactcca	ggctgtcccc	ccgaaagacc	cacttactgt	acatcctcag	gccctctcgg	720
cagctgtagg	gggtggggacc	ggggagcacc	tgccctgtagc	ccccatcaga	ccctggcccca	780
agcaccatat	ggaaaaaaag	ttctttctta	catcttaaca			819

<210> 2

<211> 242

<212> PRT

<213> homo sapien

<400> 2

Met	Gly	Glu	Ala	Ser	Pro	Pro	Ala	Pro	Ala	Arg	Arg	His	Leu	Leu	Val
1				5					10				15		
Leu	Leu	Leu	Leu	Leu	Ser	Thr	Leu	Val	Ile	Pro	Ser	Ala	Ala	Ala	Pro
			20					25					30		
Ile	His	Asp	Ala	Asp	Ala	Gln	Glu	Ser	Ser	Leu	Gly	Leu	Thr	Gly	Leu
		35					40					45			
Gln	Ser	Leu	Leu	Gln	Gly	Phe	Ser	Arg	Leu	Phe	Leu	Lys	Gly	Asn	Leu
		50				55					60				
Leu	Arg	Gly	Ile	Asp	Ser	Leu	Phe	Ser	Ala	Pro	Met	Asp	Phe	Arg	Gly
65					70				75					80	
Leu	Pro	Gly	Asn	Tyr	His	Lys	Glu	Glu	Asn	Gln	Glu	His	Gln	Leu	Gly
			85						90					95	
Asn	Asn	Thr	Leu	Ser	Ser	His	Leu	Gln	Ile	Asp	Lys	Arg	Thr	Asp	Asn

SEQLIST.TXT

Lys	Thr	Gly	100	Val	Leu	Ile	Ser	105	Glu	Asn	Val	Val	Ala	110	Ser	Ile	Gln
Pro	Ala	115	Gly	Gly	Ser	Phe	Glu	120	Gly	Asp	Leu	Lys	Val	125	Pro	Arg	Met
Glu	130	Lys	Glu	Ala	Leu	Val	135	Pro	Ile	Gln	Lys	Ala	140	Thr	Asp	Ser	Phe
145	Thr	Glu	Leu	His	Pro	Arg	Val	150	Ala	Phe	Trp	155	Ile	Ile	Lys	Leu	Pro
Thr	Arg	Arg	Ser	His	Gln	Asp	Ala	165	Leu	Glu	Gly	170	His	Trp	Leu	Ser	Glu
Arg	Lys	Arg	His	Arg	Leu	Gln	Ala	180	Ile	Arg	Asp	185	Gly	Leu	Arg	Lys	Gly
His	195	Lys	Asp	Val	Leu	Glu	Glu	200	Gly	Thr	Glu	Ser	205	Ser	Ser	His	Ser
His	210	Lys	Asp	Val	Leu	Glu	Glu	215	Gly	Thr	Glu	Ser	220	Ser	Ser	His	Ser
Leu	225	Ser	Pro	Arg	Lys	Thr	His	230	Leu	Leu	Tyr	Ile	235	Leu	Arg	Pro	Ser
Gln	Leu																Arg

<210> 3
 <211> 733
 <212> DNA
 <213> homo sapien

<400> 3
 caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
 gctcctctct accctgggga tcccctccgc tgcagctcct atccatgatg ctgacgccc 120
 agagagctcc ttgggtctca caggcctcca gaggcctact caaggtctca gccgactttt 180
 cctgaaaggt aacctcttc gggtcataga cagctttatt tctgccccca tggacttccg 240
 gggtcctcct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
 cctctccagc caccctccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat 360
 ctccgagaat gtgggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420
 ggtaaccagg atggaggaga aggaggccct ggtaccatc cagaagggcca cggacagctt 480
 ccacacagaa ctccatcccc gggtggcctt ctggatcatt aagctgccac gccggaggtc 540
 ccaccaggat gccctggagg gcggccactg gctcagcgag aagcgacacc gccctcaggc 600
 ctctccggat ggactccgca aggggaccca caaggacgtc ctagaagagg ggaccgagag 660
 ctctccac tccaggctgt ccccccgaac gaccaccta ctgtacatcc tcaggccctc 720
 tcggcagctg tag 733

<210> 4
 <211> 242
 <212> PRT
 <213> homo sapien

<400> 4
 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1 5 10 15
 Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
 20 25 30
 Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35 40 45
 Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
 50 55 60
 Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
 65 70 75 80
 Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
 85 90 95
 Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
 100 105 110
 Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
 115 120 125

SEQLIST.TXT

Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
 130 135 140
 Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
 145 150 155 160
 Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
 165 170 175
 Arg Arg Ser His Gln Asp Ala Leu Glu Gly His Trp Leu Ser Glu
 180 185 190
 Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
 195 200 205
 His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg
 210 215 220
 Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
 225 230 235 240
 Gln Leu

<210> 5
 <211> 733
 <212> DNA
 <213> homo sapien

<400> 5
 caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tctgctgct 60
 gctcctctct accctggtga tccccctcac tgcagctcct atccatgatg ctgacgccc 120
 agagagctcc ttgggtctca caggcctcca gaggcctact caaggcttca gccgactttt 180
 cctgaaaggt aacctgtctc ggagcataga cagcttattc tctgccccca tggacttccg 240
 gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
 cctctccagc cactccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat 360
 ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420
 ggtaccaggag atggaggaga aggaggccct ggtaccatc cagaaggcca cggacagctt 480
 ccacacagaa ctccatcccc ggggtggcct ctggatcatt aagctgcccac gccggaggtc 540
 ccaccaggat gccctggagg gcggccactg gctcagcgag aagcgacacc gccctgaggc 600
 catccgggat ggactccgca aggggaccca caaggacgtc ctagaagagg ggaccgagag 660
 ctctctccac tccaggctgt ccccccgaaa gaccacttta ctgtacatcc tcaggccctc 720
 tcggcagctg tag 733

<210> 6
 <211> 242
 <212> PRT
 <213> homo sapien

<400> 6
 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1 5 10 15
 Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
 20 25 30
 Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35 40 45
 Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
 50 55 60
 Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
 65 70 75 80
 Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
 85 90 95
 Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
 100 105 110
 Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
 115 120 125
 Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
 130 135 140
 Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
 Page 3

SEQLIST.TXT

145	Thr	Glu	Leu	His	Pro	150	Arg	Val	Ala	Phe	155	Trp	Ile	Ile	Lys	Leu	Pro	160	Arg
					165						170	Gly	Gly	His	Trp	Leu	Ser	175	Glu
Arg	Arg	Ser	His	Gln	Asp	Ala	Leu	Glu	Ile	185	Arg	Asp	Gly	Leu	Arg	Lys	Gly	Thr	
			180																
Lys	Arg	His	Arg	Leu	Gln	Ala	Ile	Arg	Asp	Gly	Leu	Arg	Lys	Gly	Thr				
		195						200											
His	Lys	Asp	Val	Leu	Glu	Glu	Gly	Thr	Glu	Ser	Ser	Ser	His	Ser	Arg				
		210					215												
Leu	Ser	Pro	Arg	Lys	Thr	His	Leu	Leu	Tyr	Ile	Leu	Arg	Pro	Ser	Arg				
		225				230				235									
Gln	Leu																		

<210> 7
 <211> 733
 <212> DNA
 <213> homo sapien

<400> 7																				
caccatggga	gaagcctccc	cacctgcccc	cgcaaggcgg	catctgctgg	tcctgctgct	60														
gctcctctct	accctgggtga	tcccctccac	tgcaagctct	atccatgatg	ctgacgccca	120														
agagagctcc	ttgggtctca	caggcctcca	gagccttact	caaggcttca	gccgactttt	180														
cttgaagagt	aacctgtctc	ggggcataga	cagctttatt	tctgccccca	tggaactccg	240														
gggctctccg	gggaactacc	acaaagagga	gaaccaggag	caccagctgg	ggaacaacac	300														
ctctccagc	cacctccaga	tcgacaagat	gaccgacaac	aagacaggag	aggtgctgat	360														
ctccgagaat	gtgggtggcat	ccattcaacc	agcggagggg	agcttcgagg	gtgatttgaa	420														
ggtaccacag	atggaggaga	aggaggccct	ggtaccatcc	cagaaggcca	cggaacgctt	480														
ccacacagaa	ctccatcccc	gggtggcctt	ctggatcatt	aagctgccac	ggcggaggtc	540														
ccaccacagat	ggcctggagg	gcggccactg	gctcagcgag	aagcgacacc	gcctgcaggc	600														
catccgggat	ggactccgca	aggggaccca	caaggacgtc	ctagaagagg	ggaccgagag	660														
ctctccccc	tcaggctgct	ccccccgaaa	gaccaccta	ctgtacatcc	tcaggccctc	720														
tcggcagctg	tag					733														

<210> 8
 <211> 242
 <212> PRT
 <213> homo sapien

<400> 8																				
Met	Gly	Glu	Ala	Ser	Pro	Pro	Ala	Pro	Ala	Arg	Arg	His	Leu	Leu	Val					
1				5					10				15							
Leu	Leu	Leu	Leu	Leu	Ser	Thr	Leu	Val	Ile	Pro	Ser	Thr	Ala	Ala	Pro					
			20					25					30							
Ile	His	Asp	Ala	Asp	Ala	Gln	Glu	Ser	Ser	Leu	Gly	Leu	Thr	Gly	Leu					
			35				40					45								
Gln	Ser	Leu	Leu	Gln	Gly	Phe	Ser	Arg	Leu	Phe	Leu	Lys	Gly	Asn	Leu					
			50			55					60									
Leu	Arg	Gly	Ile	Asp	Ser	Leu	Phe	Ser	Ala	Pro	Met	Asp	Phe	Arg	Gly					
			65		70					75				80						
Leu	Pro	Gly	Asn	Tyr	His	Lys	Glu	Glu	Asn	Gln	Glu	His	Gln	Leu	Gly					
			85						90					95						
Asn	Asn	Thr	Leu	Ser	Ser	His	Leu	Gln	Ile	Asp	Lys	Met	Thr	Asp	Asn					
			100					105					110							
Lys	Thr	Gly	Glu	Val	Leu	Ile	Ser	Glu	Asn	Val	Val	Ala	Ser	Ile	Gln					
			115				120					125								
Pro	Ala	Glu	Gly	Ser	Phe	Glu	Gly	Asp	Leu	Lys	Val	Pro	Arg	Met	Glu					
			130			135					140									
Glu	Lys	Glu	Ala	Leu	Val	Pro	Ile	Gln	Lys	Ala	Thr	Asp	Ser	Phe	His					
			145		150					155				160						
Thr	Glu	Leu	His	Pro	Arg	Val	Ala	Phe	Trp	Ile	Lys	Leu	Pro	Arg						
			165						170				175							

SEQLIST.TXT

Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
180 185 190
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
195 200 205
His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg
210 215 220
Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
225 230 235 240
Gln Leu

<210> 9
<211> 733
<212> DNA
<213> homo sapien

<400> 9
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tctgctgct 60
gctctctctt accctgggtga tccctccac tgcaagctct atccatgatg ctgacgccca 120
agagagcttc ttgggtctca caggcctcca gaggcctact caaggcttca gccgactttt 180
cctgaaaggt aacctgtctt ggggcataga cagcttattc tctgccccca tggacttccg 240
gggcttccct ggggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
cctctccagc cactccaga tcgacaagat agccgacaac aagacaggag aggtgctgat 360
ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420
ggtaccagag atggaggaga aggaggccct ggtaccatc cagaaggcca cggacagctt 480
ccacacagaa ctccatcccc ggggtgcctt ctggatcatt aagctgccac gccggaggtc 540
ccaccaggat gccctggagg gcagccactg gctcagcgag aagcgacacc gccctcaggg 600
catccgggat ggactccgca aggggaccca caaggacgtc cttaaaggag ggaccgagag 660
ctctctccc tccaggctgt ccccccgaaa gaccactta ctgtacatcc tcaggccctc 720
tcggcagctg tag 733

<210> 10
<211> 242
<212> PRT
<213> homo sapien

<400> 10
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
50 55 60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
100 105 110
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
115 120 125
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
130 135 140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
145 150 155 160
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
165 170 175
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu Ser Glu
180 185 190
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr

SEQLIST.TXT

195 200 205
His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His Ser Arg
210 215 220
Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
225 230 235 240
Gln Leu

<210> 11
<211> 733
<212> DNA
<213> homo sapien

<400> 11
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctgggtga tcccctccac tgcagctcct atccatgatg ctgacgccca 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cttgaagggt aacctgtctc ggggcataga cagcttattc tctgccccca tggacttccg 240
gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
cctctccagc cactccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat 360
ctccgagatg gtgggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420
gggtaccagg atggaggaga aggaggccct ggtaccctac cagaaggcca cggacagctt 480
ccacacagaa ctccatcccc ggggtggcctt ctggatcatt aagctgccac ggcgagatgc 540
ccaccaggat gccttgagg gcggccactg gctcagcgag aagcgacacc gcctgcaggc 600
catccggggt ggactccga aggggaccca caaggacgtc ctagaagagg ggaccgagag 660
ctctcccac tccaggctgt cccccgaaa gaccactta ctgtacatcc tcaggccctc 720
tcggcagctg tag 733

<210> 12
<211> 242
<212> PRT
<213> homo sapien

<400> 12
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
50 55 60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
100 105 110
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
115 120 125
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
130 135 140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
145 150 155 160
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
165 170 175
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
180 185 190
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
195 200 205
His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg
210 215 220

SEQLIST.TXT

Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
225 230 235 240
Gln Leu

<210> 13
<211> 640
<212> DNA
<213> homo sapien

<400> 13
caccatggga gaagcctccc caccctgcccc cgcaaggcgg catctgctgg tctgctgct 60
gctcctctct accctgggga tccctctccg tgcaagctct atccatgatg ctgacgccca 120
agagagctct ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaaggt aacctgtctt ggggcataga cagcttattc tctgccccca tggacttccg 240
gggcctccct gggaaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
cctctccagc cactctcaga tcgacaaggt acccaggatg gaggagaagg aggccctggt 360
acctctccag aaggccacgg acagcttcca cacagaactc catccccggg tggccttctg 420
gatcattaag ctgccacggc ggaggtccca ccaggatgcc ctggaggggc gccactggtt 480
cagcgagaag cgacaccgcc tcgaggccat ccgggatgga ctccgcaagg ggaccacaa 540
ggacgtccta gaagagggga ccgagagctc ctcccactcc aggctgtccc cccgaaagac 600
ccacttactg tacatctcta ggcctctcg gcagctgtag 640

<210> 14
<211> 211
<212> PRT
<213> homo sapien

<400> 14
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
50 55 60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Val Pro Arg Met
100 105 110
Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe
115 120 125
His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro
130 135 140
Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser
145 150 155 160
Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly
165 170 175
Thr His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser His Ser
180 185 190
Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser
195 200 205
Arg Gln Leu
210

<210> 15
<211> 640
<212> DNA

SEQLIST.TXT

<213> homo sapien

```

<400> 15
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tctgtctgct 60
gctcctctct accctgggtga tcccttcctc tgcagctcct atccatgatg ctgacgcccc 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaaggt aacctgcttc ggggcataga gacgttattc tctgccccca tggacttcgg 240
gggcctcctt cggaaactacc acaaaagagga gaaccaggag caccagctgg ggaacaacac 300
cctctccagc cactcccgag tcgacaagggt acccaggatg gaggagaagg aggcctctgg 360
accatccag aaggccacgg acagcttcca cacagaactc catccccggg tggcctctgt 420
gatcattaag ctgccacggc ggagggtcca ccaggatgcc ctggaggggcg gccactggct 480
cagcgagaag cgacaccgcc tgcaggccat cgggagtgga ctccgcgaag ggaaccacaa 540
ggagctccta gaagaggaga ccgagagctc ctcccactcc aggcgtgtccc cccgaaagac 600
ccacttactg tacatcctca ggcctctctg gcagctgtag

```

<210> 16

<211> 211

<212> PRT

<213> homo sapien

<400> 16

```

Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
50 55 60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Val Pro Arg Met
100 105 110
Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe
115 120 125
His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro
130 135 140
Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser
145 150 155 160
Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly
165 170 175
Thr His Lys Asp Val Leu Glu Glu Glu Thr Glu Ser Ser Ser His Ser
180 185 190
Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser
195 200 205
Arg Gln Leu
210

```

<210> 17

<211> 499

<212> DNA

<213> homo sapien

<400> 17

```

caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tctgtctgct 60
gctcctctct accctgggtga tcccttcctc tgcagctcct atccatgatg ctgacgcccc 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaagta cccaggatgg aggagaagga ggccttggtg ccatccaga aggccacgga 240
cagcttcac acagaactcc atccccgggt ggccttctgg atcattaaac tgccacggcg 300
gagggtccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct 360

```

SEQLIST.TXT

gcaggccatc cgggatggac tccgcaagg gaccacaag gacgtcctaa aagaggggac 420
cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatcctcag 480
gccctctcgg cagctgtag 499

<210> 18
<211> 164
<212> PRT
<213> homo sapien

<400> 18
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
50 55 60
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
65 70 75 80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
85 90 95
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100 105 110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
115 120 125
Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
130 135 140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145 150 155 160
Ser Arg Gln Leu

<210> 19
<211> 499
<212> DNA
<213> homo sapien

<400> 19
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgtctgg tctctgtcgt 60
gtctctctct accctgggtga tccctccgc tgcagctcct atccatgatg ctgacgccca 120
agagagctcc ttgggtctcca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaagta ccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga 240
cagcttccac acagaactcc atccccgggt ggcccttctgg atcattaaagc tgccacggcg 300
gaggtccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct 360
gcaggccatc cgggatggac tccgcaagg gaccacaag gacgtcctaa aagaggggac 420
cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatcctcag 480
gccctctcgg cagctgtag 499

<210> 20
<211> 164
<212> PRT
<213> homo sapien

<400> 20
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg

SEQLIST.TXT

```

50      55      60
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
65      70      75      80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
85      90      95
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100      105      110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
115      120      125
Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
130      135      140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145      150      155      160
Ser Arg Gln Leu

```

```

<210> 21
<211> 499
<212> DNA
<213> homo sapien

```

```

<400> 21
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tctgctgct 60
gctcctctct accctgggga tccccctcgc tgcagctcct atccatgat ctgacgcca 120
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
cctgaaagta ccaggatgg aggagaagga ggcccttgta cccattcaga aggccacgga 240
cagcttccac acagaactcc atccccgggt ggcccttggt atcattaagc tgcacgcg 300
gaggtccac caggatggcc tggagggcag ccactggctc agcgagaagc gacaccgcct 360
cgaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctag aagaggggac 420
cgagagctcc tccactcca ggctgtcccc ccgaaagacc cacttactgt acatcttcag 480
gccctctcgg cagctgtag

```

```

<210> 22
<211> 164
<212> PRT
<213> homo sapien

```

```

<400> 22
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1      5      10      15
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
20      25      30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35      40      45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
50      55      60
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
65      70      75      80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
85      90      95
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100      105      110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
115      120      125
Gly Thr His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His
130      135      140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145      150      155      160
Ser Arg Gln Leu

```

SEQLIST.TXT

<210> 23
 <211> 499
 <212> DNA
 <213> homo sapien

<400> 23
 caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
 gctcctctct accctgggtga tccccctcgc tgcagctcct atccatgatg ctgacgcccc 120
 agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
 cctgaaagta ccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga 240
 cagcttccac acagaactcc atccccgggt ggcttcttgg atcataaagc tgccacggcg 300
 gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct 360
 gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctaa aagaggggac 420
 cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatctctag 480
 gccctctcgg cagctgtag 499

<210> 24
 <211> 164
 <212> PRT
 <213> homo sapien

<400> 24
 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1 5 10 15
 Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Pro
 20 25 30
 Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35 40 45
 Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
 50 55 60
 Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
 65 70 75 80
 Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
 85 90 95
 Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
 100 105 110
 Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
 115 120 125
 Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
 130 135 140
 Ser Arg Leu Ser Pro Arg Lys Thr His Leu Tyr Ile Leu Arg Pro
 145 150 155 160
 Ser Arg Gln Leu

<210> 25
 <211> 499
 <212> DNA
 <213> homo sapien

<400> 25
 caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
 gctcctctct accctgggtga tccccctcac tgcagctcct atccatgatg ctgacgcccc 120
 agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt 180
 cctgaaagta ccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga 240
 cagcttccac acagaactcc atccccgggt ggcttcttgg atcataaagc tgccacggcg 300
 gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct 360
 gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctaa aagaggggac 420
 cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatctctag 480
 gccctctcgg cagctgtag 499

<210> 26

SEQLIST.TXT

<211> 164

<212> PRT

<213> homo sapien

<400> 26

```

Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1      5      10      15
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
 20      25      30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35      40      45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
 50      55      60
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
 65      70      75      80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
 85      90      95
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100      105      110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
115      120      125
Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
130      135      140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145      150      155      160
Ser Arg Gln Leu

```